

## ABSTRACT OF THE DISCLOSURE

Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. Screens for identifying agents that modulate sphingolipid metabolism and/or signaling pathways are also provided.

200116.405C1 / 386707\_1.DOC